



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,949	01/29/2002	Hiromi Yamamoto	8013-1003	3610

466 7590 11/30/2004

YOUNG & THOMPSON  
745 SOUTH 23RD STREET  
2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT	PAPER NUMBER
----------	--------------

2655

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/057,949

Applicant(s)

YAMAMOTO ET AL.

Examiner

Jorge L Ortiz-Criado

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 04/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3,5,7-9,11,13,14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kumon et al. J.P. Publication Number 2000-322742.

Regarding claim 1, Kumon et al. discloses an apparatus for performing recording/reproducing data compatibly to plural kinds of optical disk, said apparatus including:

an optical head; an optical head control unit for controlling said optical head; a reproducing unit for reproducing data from said optical disk through said optical head; a recording unit for recording data into said optical disk through said optical head (See Figure drawing 2 ref # 202, 206; detailed description [0015]-[0016]); and

a disk-kind determination unit for determining a kind of said optical disk (See detailed description [0016]; figure drawing 2 ref # 207,208,209,210), said disk-kind determination unit further comprising:

a meandering frequency detecting unit for detecting a meandering frequency of an information track of said optical disk through said optical head (See detailed description [0016]; figure drawing 2 ref # 207); and

a determination unit for determining a kind of said optical disk based on said meandering frequency detected by said meandering frequency detecting unit (See detailed description [0016]; figure drawing 2 ref # 209)

Regarding claims 2 and 8, Kumon et al. discloses further including a control unit for changing recording/reproducing conditions in accordance with said detected kind of said optical disk (See detailed description [0003], [006], [0034]-[0035], [0041])

Regarding claims 3 and 9, Kumon et al. discloses wherein said meandering frequency detecting unit further comprises: a clock signal extraction circuit for extracting a clock signal from a meandering signal from said optical head (See detailed description [0019]; ref # 207); and

a clock frequency measuring circuit for measuring a frequency of said extracted clock signal to define said measured frequency as said meandering frequency (See detailed description [0020]-[0021]; ref # 208)

Regarding claim 5 and 11, Kumon et al. discloses wherein said meandering frequency detecting unit further comprises:

a clock signal extraction circuit for extracting a clock signal from a meandering signal from said apical head (See detailed description [0019]; ref # 207) ;

Art Unit: 2655

a clock signal extraction frequency range setting circuit for setting a clock signal extraction frequency range for said clock signal extraction circuit (See detailed description [0019]); [0026]-[0029] figure drawings 2, 4, ref # 207); and

a clock signal extract determination circuit for determining whether or not said clock signal extraction circuit has succeeded extraction of said clock signal from said meandering signal in said clock signal extraction frequency range which has been set by said clock signal extraction frequency range setting circuit (See detailed description [0029]-[0033]; figure drawing 2 ref# 208, 209)

Regarding claim 7, Kumon et al. discloses an apparatus for determining a kind of optical disk, said apparatus including: a meandering frequency detecting unit for detecting a meandering frequency of an information track of said optical disk; and a determination unit for determining a kind of said optical disk based on said meandering frequency detected by said meandering frequency detecting unit (See detailed description [0016]; figure drawing 2 ref # 207,208,209,210)

Regarding claims 13,14 and 16, Method claims 13,14 and 16 are drawn to the method of using the corresponding apparatus claimed in claims (1,3,5) and/or (7,9,11). Therefore method claims 13,14 and 16 correspond to apparatus claims (1,3,5) and/or (7,9,11) and are rejected for the same reasons of anticipation as used above.

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumon et al. J.P. Publication Number 2000-322742 in view of Shikichi J.P. Publication Number 08-065050)

Kumon et al. teaches a clock signal extraction circuit for extracting a clock signal from a meandering signal from said apical head (See detailed description [0019]; ref # 207);

a clock signal extraction frequency range setting circuit for setting a clock signal extraction frequency range for said clock signal extraction circuit (See detailed description [0019]); [0026]-[0029] figure drawings 2, 4, ref # 207); and

a clock signal extract determination circuit for determining whether or not said clock signal extraction circuit has succeeded extraction of said clock signal from said meandering signal in said clock signal extraction frequency range which has been set by said clock signal extraction frequency range setting circuit by measuring the frequency of said extracted clock signal to define said measured frequency as said meandering frequency (See detailed description [0020]-[0033]; figure drawing 2 ref# 208, 209)

Kumon et al. teaches selecting the range of the desired frequencies to be extracted by adjusting/changing/varying the range of the clock signal extracting circuit 207. But, Kumon et al., does not expressly disclose having a plurality of clock signal extraction circuits having different clock signal extraction frequency ranges

Shikichi, which teaches a variable/adjustable/changeable signal frequency extraction circuit by setting the desired signal extraction frequency range of the frequency to be extracted **OR** having the equivalent of having a plurality of signal frequency extraction circuits with different signal extraction frequency ranges and selecting the desired frequency by either a variable/adjustable/changeable circuit or selecting from plurality of circuits with different ranges (See detailed description [0021]-[0029]; Figures drawings 5, 7)

Because these two elements were art-recognized equivalents at the time of the invention in those circuits applications one of ordinary skill in the art would have found obvious to substitute a plurality of clock signal extraction circuits with different signal extraction frequency ranges for the variable/adjustable/changeable circuit 207.

5. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumon et al. J.P. Publication Number 2000-322742 in combination with Shikichi J.P. Publication Number 08-065050) ad further in view of Tanaka J.P. Publication Number 60-227507.

Kumon et al. teaches a clock signal extraction circuit for extracting a clock signal from a meandering signal from said apical head (See detailed description [0019]; ref # 207);

Art Unit: 2655

a clock signal extraction frequency range setting circuit for setting a clock signal extraction frequency range for said clock signal extraction circuit (See detailed description [0019]); [0026]-[0029] figure drawings 2, 4, ref # 207); and

a clock signal extract determination circuit for determining whether or not said clock signal extraction circuit has succeeded extraction of said clock signal from said meandering signal in said clock signal extraction frequency range which has been set by said clock signal extraction frequency range setting circuit by measuring the frequency of said extracted clock signal to define said measured frequency as said meandering frequency (See detailed description [0020]-[0033]; figure drawing 2 ref# 208, 209)

Kumon et al. teaches selecting the range of the desired frequencies to be extracted by adjusting/changing/varying the range of the clock signal extracting circuit 207. But, Kumon et al., does not expressly disclose having a plurality of clock signal extraction circuits having different clock signal extraction frequency ranges and plurality of clock signal extraction determination circuits.

Shikichi, which teaches a variable/adjustable/changeable signal frequency extraction circuit by setting the desired signal extraction frequency range of the frequency to be extracted **OR** having the equivalent of having a plurality of signal frequency extraction circuits with different signal extraction frequency ranges and selecting the desired frequency by either a variable/adjustable/changeable circuit or selecting from plurality of circuits with different ranges (See detailed description [0021]-[0029]; Figures drawings 5, 7)

Tanaka, teaches a plurality of signal frequency extraction circuits with different signal extraction frequency ranges and a plurality of signal extraction determination circuits for



Art Unit: 2655

determining whether or not each of said plural signal extraction circuit has succeeded extraction of said signal in corresponding one of said different signal extraction frequency ranges (See Abstract; ref# extraction circuits 5,6,7, extraction determinations circuits 8, 9, 10)

Because these elements were art-recognized equivalents at the time of the invention in those circuits applications one of ordinary skill in the art would have found obvious to substitute a plurality of clock signal extraction circuits with different signal extraction frequency ranges for the variable/adjustable/changeable circuit 207 and a plurality of signal extraction determination circuits for the signal extract determination circuit 208,209).

Regarding claims 15 and 17, Method claims 15 and 17 are drawn to the method of using the corresponding apparatus claimed in claims (4,10) and (6,12). Therefore method claims 15 and 17 correspond to apparatus claims (4,10) and (6,12)) and are rejected for the same reasons of obviousness as used above.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. U.S. Publication Number 2002/0075780 to Ogihara, which discloses plural filter means for extracting plural frequency components corresponding to the frequencies of the groove wobbles of the plural kinds of recording-capable optical disks and disk identification means for identifying a kind of the mounted optical disk, based on the output signals from the plural filter means.

- b. U.S. Patent No. 5,055,938 to Misumi et al., which discloses a reproduction apparatus which includes plural filter means for extracts plural frequency components corresponding to the frequencies of the recording optical disk of the plural kinds of recording optical disks and disk identification units for identifying a kind of the mounted optical disk, based on the output signals from the plural filter units.
- c. U.S. Patent No. 5,764,610 to Yoshida et al., which discloses an apparatus for determining a kind of optical disk, said apparatus including: a meandering frequency detecting unit for detecting a meandering frequency of an information track of said optical disk; and a determination unit for determining a kind of said optical disk based on said meandering frequency detected by said meandering frequency detecting unit.
- d. J.P. Publication No. 2001-167510 to Iida et al., which discloses an apparatus for determining a kind of optical disk, said apparatus including: a meandering frequency detecting unit for detecting a meandering frequency of an information track of said optical disk; and a determination unit for determining a kind of said optical disk based on said meandering frequency detected by said meandering frequency detecting unit.
- e. J.P. Publication No. 2001-182314 to Usami, which discloses and an apparatus for determining a kind of optical disk by judgment as to the superposing of wobbling detecting signal on the tracking error signal. If the superposing of the wobbling signal is judged, a recording medium is judged as one kind, and if the superposing of the wobbling signal is not judged, a recording medium is judged as another kind.

Art Unit: 2655


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

joc

  
TAN DINH  
PRIMARY EXAMINER  
11/26/04